Daily Diary Report by Bid Item

Contract No.: 04-0120F4
Diary #: 962 **Const Calendar Day:** 535 **Date:** 21-Nov-2013 Thursday
Inspector Name: Brignano, Bob **Title:** Transportation Engineer
Inspection Type:
Shift Hours: **Break:** **Over Time:**
Federal ID:
Location:
Reviewer: Schmitt, Alex **Approved Date:** **Status:** Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature **7 AM** **12 PM** **4PM**
Precipitation **Condition** cloudy

Working Day ☑ If no, explain:

Diary: Dispute ☐

General Comments

CCO 314, SAMPLING AND TESTING A354 GRADE BD MATERIAL:

Dave Van Dyke from VGO works from 0800 to 1700 on site, with 1200 to 1300 lunch. He is present for today's installation of the rod in Test Rig #5 to verify that the strain gauges and wires are not damaged. After the rod is installed, he performs a quick check of the instruments, one-by-one, to verify that they can be read and are not damaged. Then, he runs the wires from the instruments out of the test rig handhole. He does not attach the wires to the wire run from the data logger. The main wire run is temporarily not useable today due to the water flood from the intentionally plugged drain (for SWPPP) over the timber enclosure over the wire run. After the water is drained, Dave takes apart the timber enclosure and elevates the wires on top of the k-rail and sandbags to the south of the test rigs so that the wires can dry (yesterday only elevated the wire extension bundles from the main run to the test rigs).

Today CCC paints the spherical washer for the 2" diameter test rod (hot-dip galvanized) and 2" diameter nut (hot-dip galvanized). The nut comes from Dyson galvanized, but the spherical washer needs to be painted with zinc rich primer on site. Only the one 2" diameter spherical washer for the test rod end is painted, with the two 3" diameter spherical washers for the jacking rod not painted because they are not adjacent to the wet chamber. Note that Dyson did enlarge the opening of the slot in the washer per the plans, but upon examination of the fit up with the nut, we determine that the slot should be opened some more to facilitate the installation of backer rod and plumbers putty after verification of no entrapped air in the wet chamber. ABF's ironworkers use a die grinder to slightly elongate and widen the open end of the slot in the washer prior to CCC painting the washer.

Yesterday, ABF SWPPP engineer Bill O'Sullivan checked the water accumulating in the test rig area for pH and turbidity. He determined that the water could be pumped to the adjacent DI per the approved SWPPP. He provided the information to CT SWPPP for review, and CT SWPPP determined in the afternoon that the water may be pumped to the adjacent DI. That did not happen yesterday because most of the ABF labor at Pier 7 was gone in the afternoon due to the rain, so the water is pumped this morning. Setting up pumps are laborer foreman Ignacio Garcia and laborer Carlos (Pedro) Garcia, along with a Kubota Cart. The Whisperwatt 7000 generator at the test rig area is used to run 4 pumps for a few hours in the morning. The 2 laborers are present for the first few hours, and then there is just one laborer (Pedro) on this operation until the work is done mid-morning and then for other cleanup until noon – Ignacio ~ 2hrs and Pedro ~ 5hrs on CCO 314, then work elsewhere at Pier 7 for the remainder of the day. Two of the four pumps used are those purchased for CCO 314 pumping of de-ionized water from 55-gallon barrels to the 300 gallon tanks for the test rig wet chambers – one of those was previously contaminated and set aside for other pumping, and now the second pump is contaminated. That second pump that was clean and set aside for wet chamber water had been removed from the CCO 314 test rig site sometime in

the last month and was contaminated prior to today's work. I discuss with ABF Engineer Kelvin Chen that we will need to buy new pumps to ensure that we use clean pumps in the future for pumping of de-ionized water from 55-gallon barrels to the 300 gallon tanks for the test rig wet chambers.

ABF ironworkers Barry Rothman and Rob Martell work on CCO 314 0700 to 1730, with work on Test Rig #5. After finishing the 10-hour day on CCO 314, they work on other non-CCO operations at Pier 7 on the Left Coast Lifter Shear Leg Crane to prep it for transport off the job. Operator Nick Schaffer and Ian Wells work for short periods of time today at the CCO 314 site to operate forklifts.

Using an extendable forklift (operator Nick Schaffer), the test rod, coupler, and jacking rod are installed in Test Rig #5. The rod is installed approximately 0830. Prior to installing the rod, the grommet is installed in the hole in the diaphragm between the wet chamber and the dry chamber. Using one of the approved grease products (Thomas Lubriseal Stopcock Grease or Dow Corning High-Vacuum Grease), grease is applied between the grommet and the cylindrical sleeve (threads on the test rod) to ease the sliding of the rod through the grommet.

After the Test Rig #5 rod installation, the end plate at the jacking end is installed approximately 0900. The end plate at the jacking end is bolted. These black A490 bolt assemblies are fully tensioned. After installing the bolts, completing the work (tensioning) is slightly delayed because the washers sent by XKT with the test rigs and the bolt assemblies are missing, so the ironworkers find other appropriately sized washers elsewhere at the Pier 7 warehouse. The bolt assemblies are tensioned by the turn of the nut method with an impact gun with the IR P185 compressor.

The coupler inside the dry chamber of the test rig is shimmed with the approved neoprene product. The longitudinal (north/south) position of the rod is adjusted so the cylindrical sleeve is in the appropriate position in the grommet. The ABF ironworkers seal between the cylindrical sleeve and the grommet with the approved Permatex Ultra Black Maximum Oil Resistance RTV Silicone Gasket Maker. They also seal between with the same caulk product the joint between the grommet and the diaphragm. Both of these sealing points on the grommet are sealed from inside the wet chamber (end plate not on yet) and from inside the dry chamber (using handhole next to the diaphragm). The joints of the backing bars inside the wet chambers are also sealed with the same caulk product – the epoxy paint applied in the shop sometimes does not bridge the interface between the backing bar and the test rig plate.

Also at Test Rig #5, the drill and tap hole for the VGO thermocouple has the threads chased with a tap and the thermocouple threads successfully test fit. Then the chased threads in the drill and tap hole are painted with epoxy paint by the ironworkers. Also, the A325 plug bolt in place of the originally planned reference electrode is painted with epoxy paint by the ironworkers. The epoxy paint is Carboguard 890 from a touchup kit provided by XKT/ABC (suppliers of the original test rigs).

For the VGO wire run to the south of the test rigs, in order to elevate above the area that will be flooded when it rains because of the intentionally plugged drain (for SWPPP), ABF operators in forklifts (first Nick Schaffer and then Ian Wells) move 12x12 timbers to build up two timbers high. Earlier in the day VGO removed the wire run timber enclosure, and after ABF builds the 12x12 raised section, VGO will build the enclosure for the wire run on top of the 12x12's.

Because Test Rig #5 will use 300 ton jacks instead of the previously planned 150 ton jacks, the lugs on the end plate and jacking beam need to be removed. Today, ABF ironworkers cut the 3 lugs on the end plate for one of the jacks, and grind smooth any portions not removed by cutting. The lugs are torch cut and the remainder left after cutting is ground flush. Not cut yet are the other 3 lugs on the end plate for the other jack or the 6 lugs for both jacks on the jacking beam. At one lug, the base steel of the end plate is gauged or nicked by the torch and/or the grinding disk. This gauge or nick is approximately 3" long and 1/8" deep. The acceptability or repair of this gauge or nick will be addressed at a later date.

ABF Engineer Kelvin Chen spends part of today working in the office and field on CCO 314 issues.

There is a hydraulic pump (Powerteam) on idle/standby at the work area. A generator – Whisperwatt 7000

– ABF ID 002343 is used. A compressor – IR P185R – ABF ID 002075 is used. The ironworkers have a Kubota Cart. An extendable forklift and a small forklift are used part time as needed.

Note that there is k-rail at this work area. Some of the k-rail is rented and addressed by the rental agreement. Some of the k-rail is ABF's k-rail (27 pcs @20' and 8 pcs @10') used on site and paid as rented from ABF on a daily basis. However, one of the purchased 10' k-rail and one of the rented 20' k-rail have been removed at some point by ABF's ironworkers. To compensate, the ABF k-rail quantities will be reduced by one for each length. To elevate the k-rail, crane mats and timber blocking (12x12's) are in use. The k-rail quantities are as follows:
10' bought k-rail = 20 pieces (minus 1 missing)
10' ABF k-rail = 8 pieces
20' rented k-rail = 22 pieces (minus 1 missing)
20' ABF k-rail = 27

See Victor Altamirano diary for labor/equipment details, including the agreed extra work with ABF per a signed Extra Work Order with ABF for CCO 314 work.

INSPECTOR OT REMARK:

Office 2 hours: I am working in the office on CCO 314 issues, including addressing issues with the DJV's draft plans for Test IV test rigs for the 2008 rods (Test Rigs #12 and #13, or modify existing test rigs). My shift is 0700 to 1730 and my OT hours are 1530 to 1730.